Army Programming Process and the Environmental Cost Standardization Model

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Report Documentation Page

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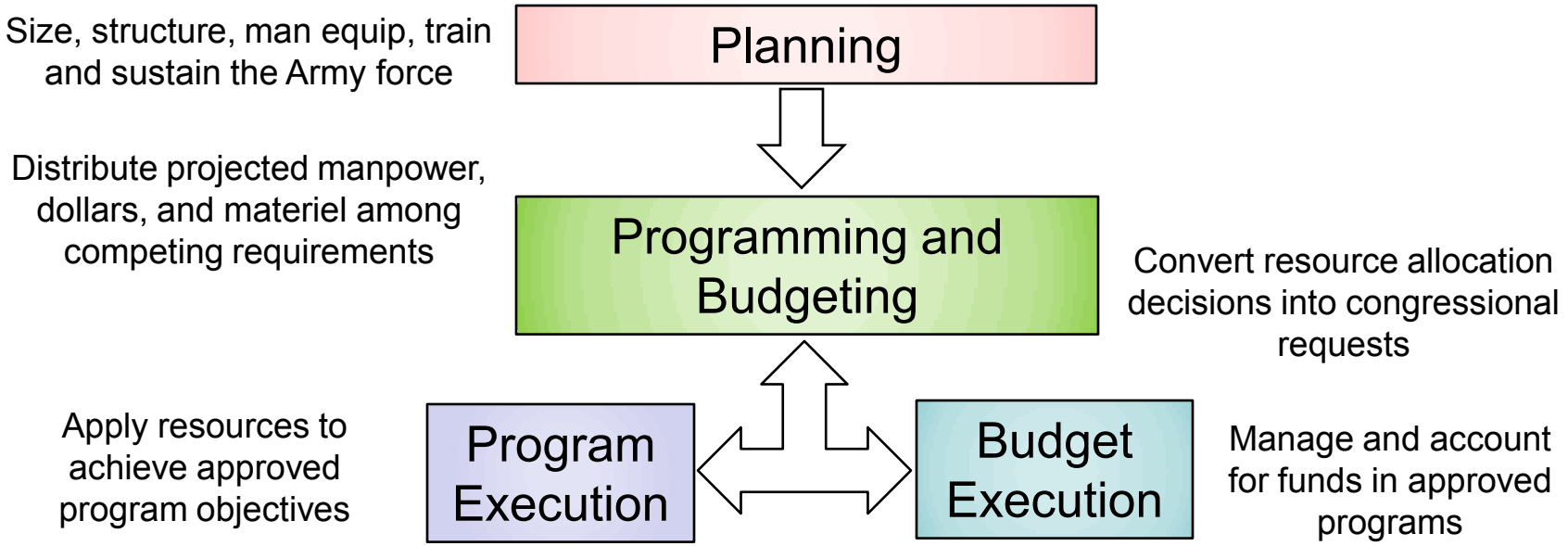
Agenda

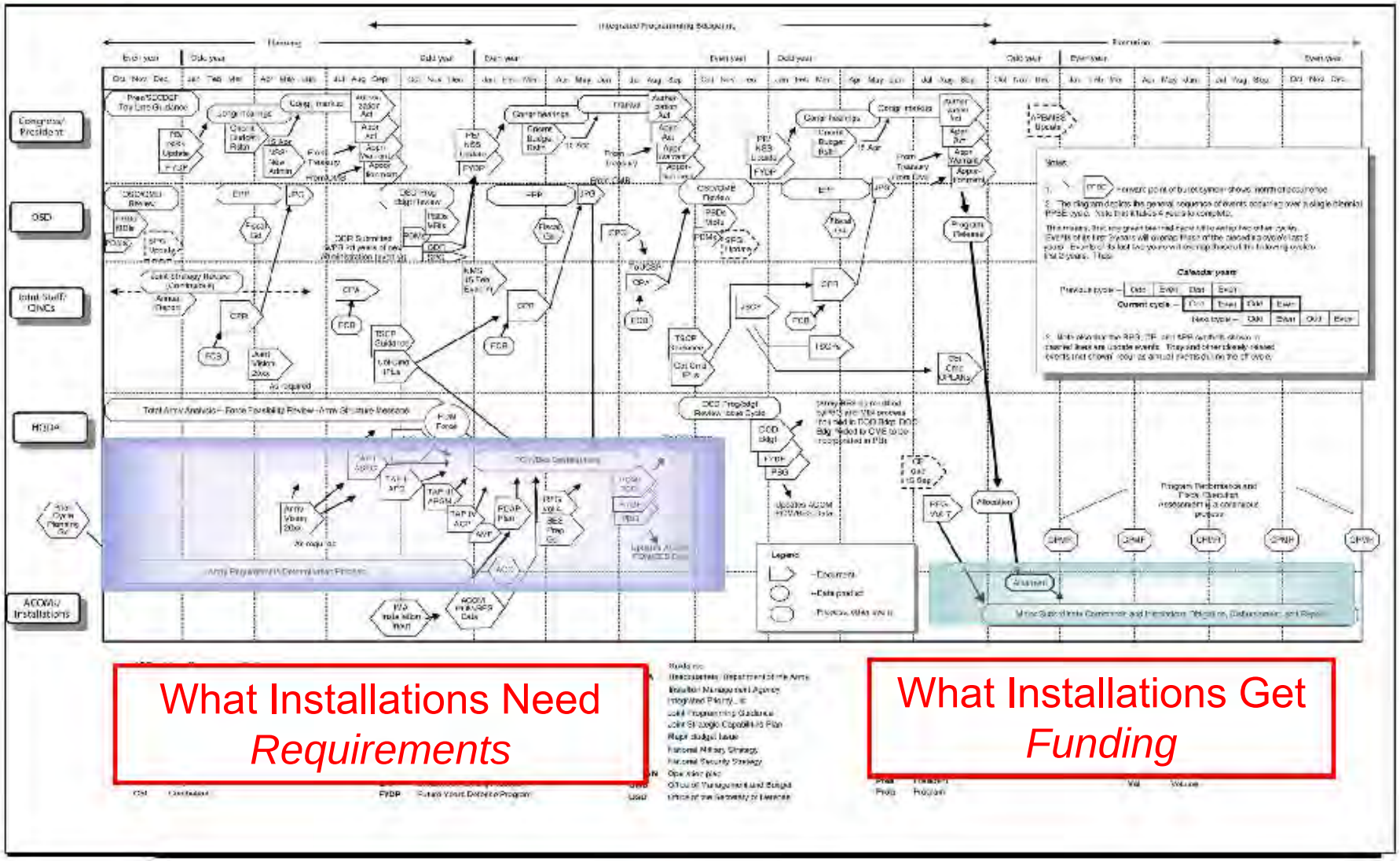
- Army PPBES Process
- Requirements Building Process
- Environmental Cost Standardization (ECS) Overview
- POM Deliberative Process
- Funds Distribution Process

Army PPBES Process

Army PPBE's main objective is to *establish*, *justify*, and *acquire* the fiscal and manpower resources needed to accomplish the Army's assigned missions in executing the Defense Strategy



Army PPBES Cycle

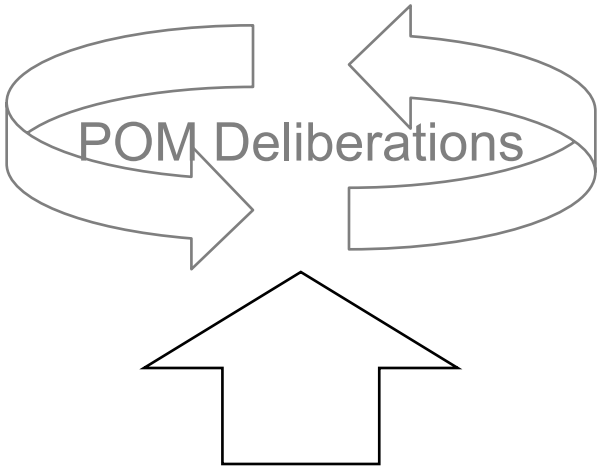


What Installations Need…
Requirements Building Process

What Installations Need

From POM/BES to PB

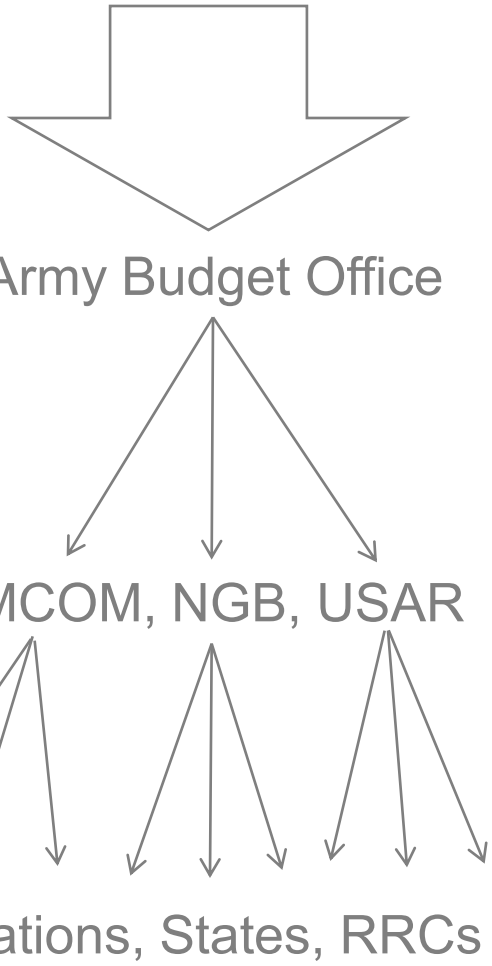
Requirements and Funding Set for POM Years



ECS Requirements
+
Non-Recurring Requirements

POM – Program Objective Memorandum
BES – Budget Estimate Submission

Presidents Budget (PB) Set



Background

- Environmental Program Requirements (EPR) turned–off October 2005:
  - Bottoms up build, labor intensive submittal and process
  - Inconsistent costing approaches
  - Out-year requirements dropped off significantly
- Environmental Cost Standardization (ECS) model first used for POM FY08-13
- ECS revision/update began May 07 to provide greater visibility, auditabilty, reproducibility in recurring activity costs
- ECS has migrated from desktop into module of BOS Requirements Module (BRM)

What is ECS?

- Generates requirements for Environmental Quality (EQ) program activities
- Hybrid Activities Based Costing
- Methodology designed to use data from existing authoritative data sources updated as needed
- Utilized subject matter experts to
  - Identify costs
  - Calculate unit costs specifically designed for this methodology
  - Determine cost adjustment factors base on installation tier, size, and location
- Extensive documentation
  - Unit cost factors
  - Assumptions
  - Data sources
- Flexible enough to incorporate future condition changes and periodic refinements

What does ECS do?

- ECS generates costs for *recurring requirements* for Environmental Quality (EQ) program activities –
  - Recurring requirements include costs that are either annually recurring or cyclic in nature
  - Generates requirements by installation, by program area, and by activity
- Generates sufficient requirement costs to:
  - Maintain steady state in EQ programs
  - Meet current legal and policy-driven requirements
  - Assume full and sustained compliance
  - Tiered funding levels allows either “Validated” or “Critical”

What Activities are in ECS?

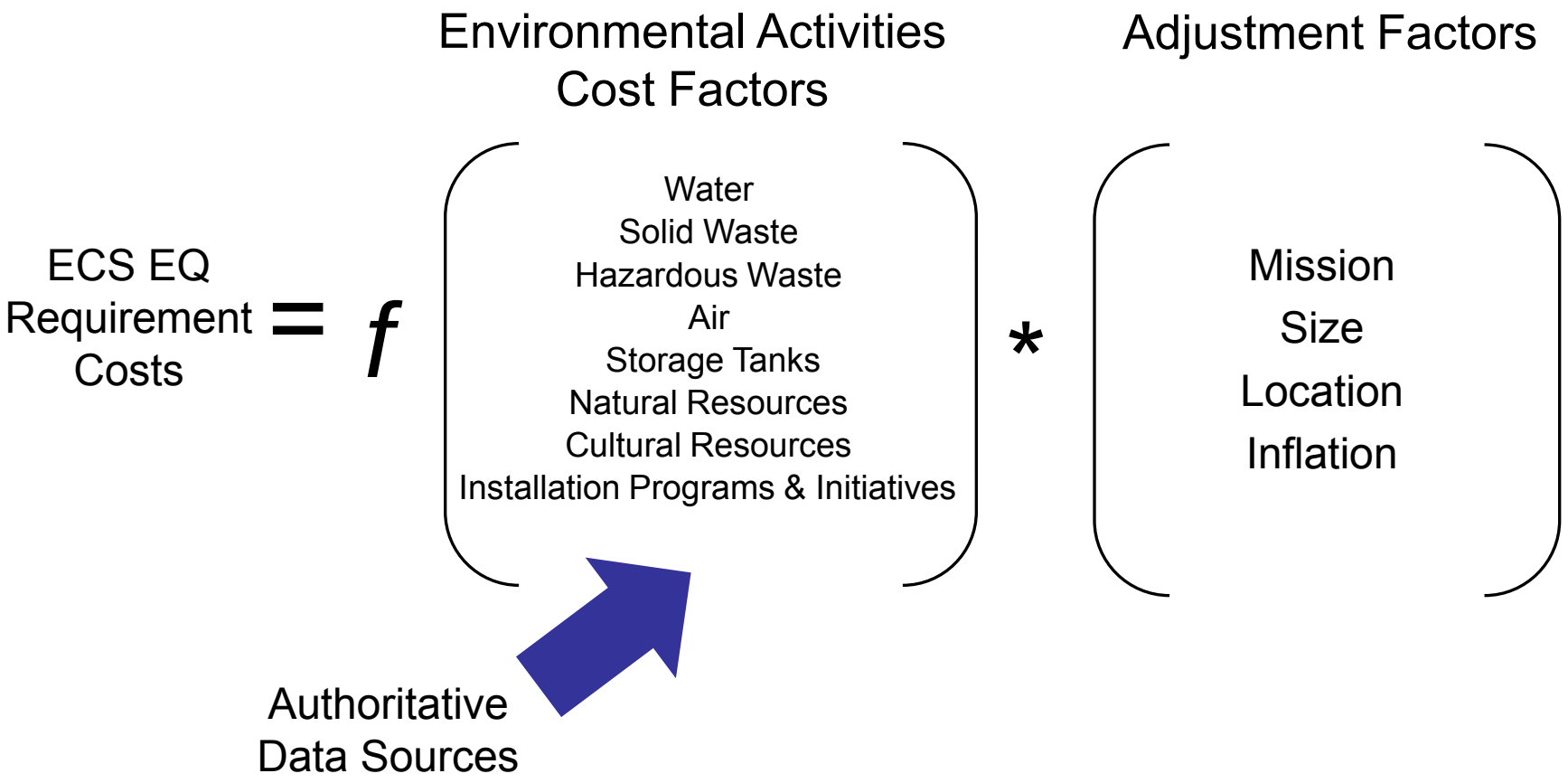
- Personnel
- Compliance
  - Clean Air Program
  - Clean Water Program
  - Safe Drinking Water Programs
  - Hazardous Waste
  - Storage Tanks
  - Toxic Substances Control
- Pollution Prevention
  - Emergency Planning and Community Right-to-Know Act (EPCRA)
  - Pollution Prevention Plans
- Conservation
  - Natural Resources
  - Cultural Resources
- Installation Programs and Initiatives

Statistical Analyses

- Used to identify appropriate adjustment factors for hybrid-activity based costing
- Analyzed differences in environmental expenditures (6 years of data):
  - Mission (Tier 1, 2, 3)
  - Size (Small, Medium, Large, etc.)
  - Location (Alaska, Hawaii, Europe, Pacific Rim**)
- Continuing to analyze data for possible links between environmental funding and real property assets
  - No statistical significance established to date
  - No linkage between real property and ECS for POM FY10-15
  - Continue to analyze the appropriate linkage

** Unique factors to account for specific issues

ECS Activity Equation



ECS Basic Framework

Cost Categories	Cost Driver / Unit of Measure	Unit Cost 1			Adjust ment variable 1	Adjustment coefficient
		$/Unit of Measure	Base Year	Unit Cost based on		
Water						
Wastewater						
Monitoring and Sampling	Total Cost per wastewater system if wastewater is not privatized; remote factors applied	$1,234	2006	Applies to all installations	Hawaii adjustment: applies to all installations in Hawaii	1.23
Monitoring and Sampling - Lab analyses	Total Cost per wastewater system if wastewater is not privatized	$123	2007	Applies to all installations		
Permit Applications	Total cost per CONUS installations only	$123	2006	Medium installations		

Example only numbers not realistic

ECS Documentation

CATEGORY	Water
ACTIVITY	CWA: Non-Point Source (SA)
REGULATORY OR POLICY DRIVER	CWA Statute: 33 USC 125[illegible] et seq. Regulation: 40 CFR 122.21
DEFINITION	This activity is intended to cover costs to comply with Section 319 of the CWA and related state, local, or foreign governing standards that regulate non point source discharges. Training areas are used for combat and maneuver training and can be characterized as continuously disturbed areas. These disturbed areas are often subject to more extensive BMPs for installation and management of erosion and sediment controls as required by their Storm Water NPDES Permits and/or SWPPPs. These activities include preventing sedimentation, beach, or stream bank erosion if not attributable to maneuver damage; tank trail maintenance; road maintenance; firebreaks; or other erosion not resulting from the lack of maintenance to real property
ENGINEERED ACTIVITY COST	$1.19 (SFY00)
UNIT OF MEASURE	Per acre
CALCULATION	**IMCOM – CONUS** *Cost = Engineered cost per maneuver area acre * Number of maneuver area acres* **IMCOM OCONUS** *Cost = Engineered cost per maneuver area acre * Number of maneuver area acres* **USAR** *Not applicable* **Army National Guard** *Cost = Engineered cost per maneuver area acre * Number of maneuver area acres*
BASIS FOR ENGINEERED ACTIVITY COST	Engineered cost per maneuver area acre is based on the maintenance costs associated with erosion and sediment controls. *Engineered cost per maneuver area acre = [(Sediment basin cubic feet/acre of disturbed area * Cost to install/sediment basin cubic feet) + 0.25 annual maintenance cost/annual install cost * (Sediment basin cubic feet/acre of disturbed area * Cost to install/sediment basin cubic feet)]*
ASSUMPTIONS	All Army installations with maneuver areas will require sediment and erosion control measures and that those measures will require annual maintenance.

Clean Water Act

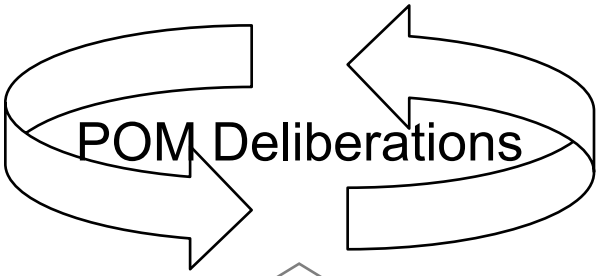
	Sediment basins will be used to control discharges of sediment-laden storm water runoff from maneuver areas. Cost was taken from an EPA study for installation and maintenance of sediment basins for disturbed land The data source for the number of installation maneuver area acres is data reported in HQEIS CATCODEs 17710 and 17720. 3,000 ft^3 of sediment basin will be needed per acre of disturbed area. Cost to install sediment basin is $0.22/$ft^3$. The annual maintenance cost of a sediment basin is equal to 25% of the cost to install a sediment basin Sediment basins have a 1-year effective life and must be re-installed (or the equivalent) every year. OCONUS installations have analogous CWA requirements outlined in country-specific FGS.
REFERENCES	CWA, 33 USC 125[illegible] et seq., 40 CFR 122.21 EPA 2002. *Development Document for Proposed Effluent Guidelines and Standards for the Construction and Development Category*, June. Costs in document are given in $FY00 HQEIS CATCODEs 17710 and 17720. Used professional experience and best engineering judgment derived by assisting various DoD installations in water program activities. Consultation with HQDA and other Army subject matter experts and technical work groups.

Provides functional definition, cost factors, sources, definition, cost factors, calculations, assumptions, references

What Installations Need

From POM/BES to PB

Requirements and Funding Set for POM Years



ECS Requirements
+
Non-Recurring Requirements

POM – Program Objective Memorandum
BES – Budget Estimate Submission

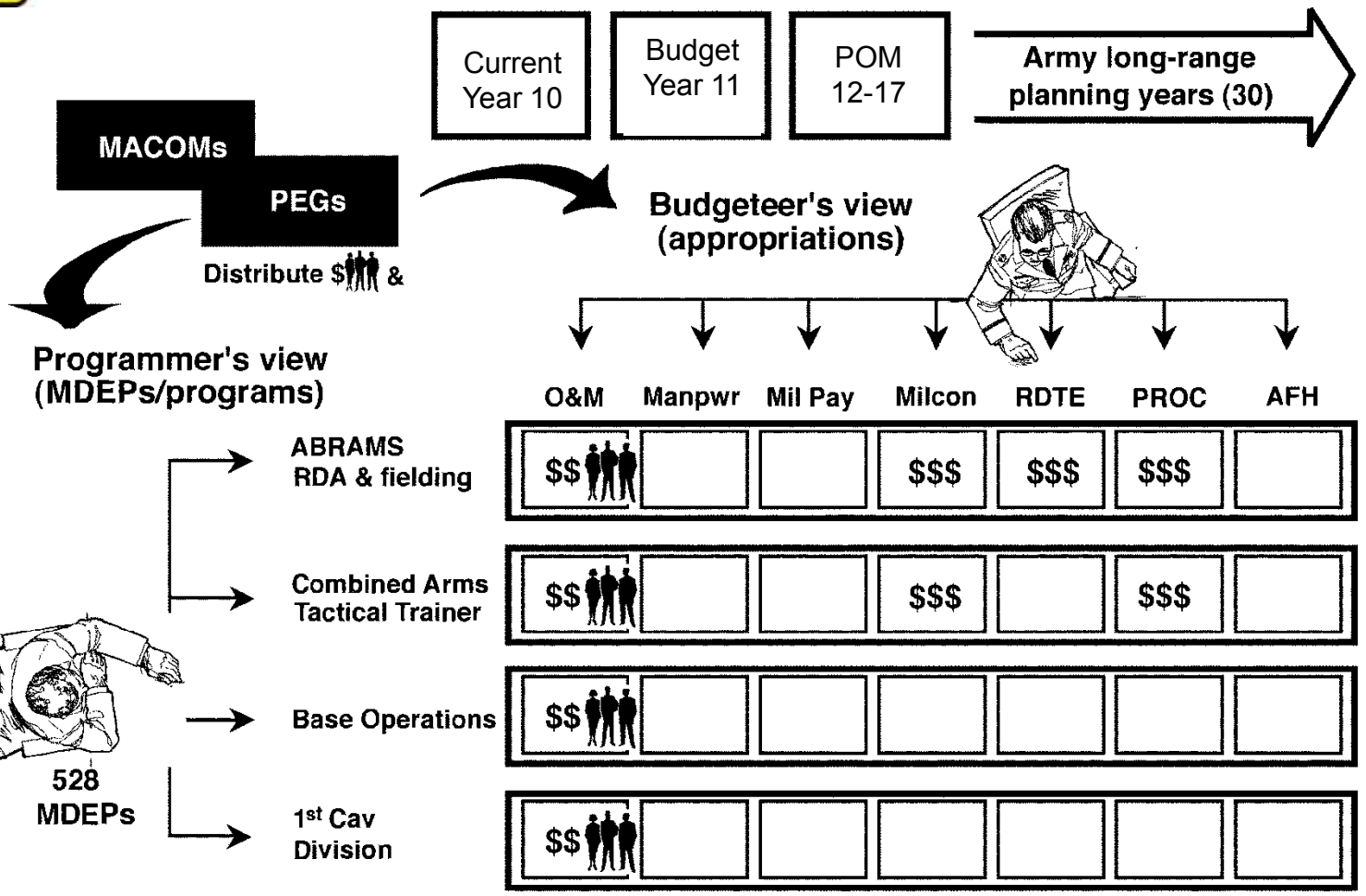
Presidents Budget (PB)

Army Budget Office

IMCOM, NGB, USAR

Installations, States, RRCs

POM Deliberative Process



Note. —The PPBES goal centers on simultaneously developing a 6-year Program Objective Memorandum (POM) and 2-year Budget Estimate Submission (BES).

What Installations Get…
Funding Distribution Process

What Installations Get

From POM/BES to PB

Requirements and Funding Set for POM Years

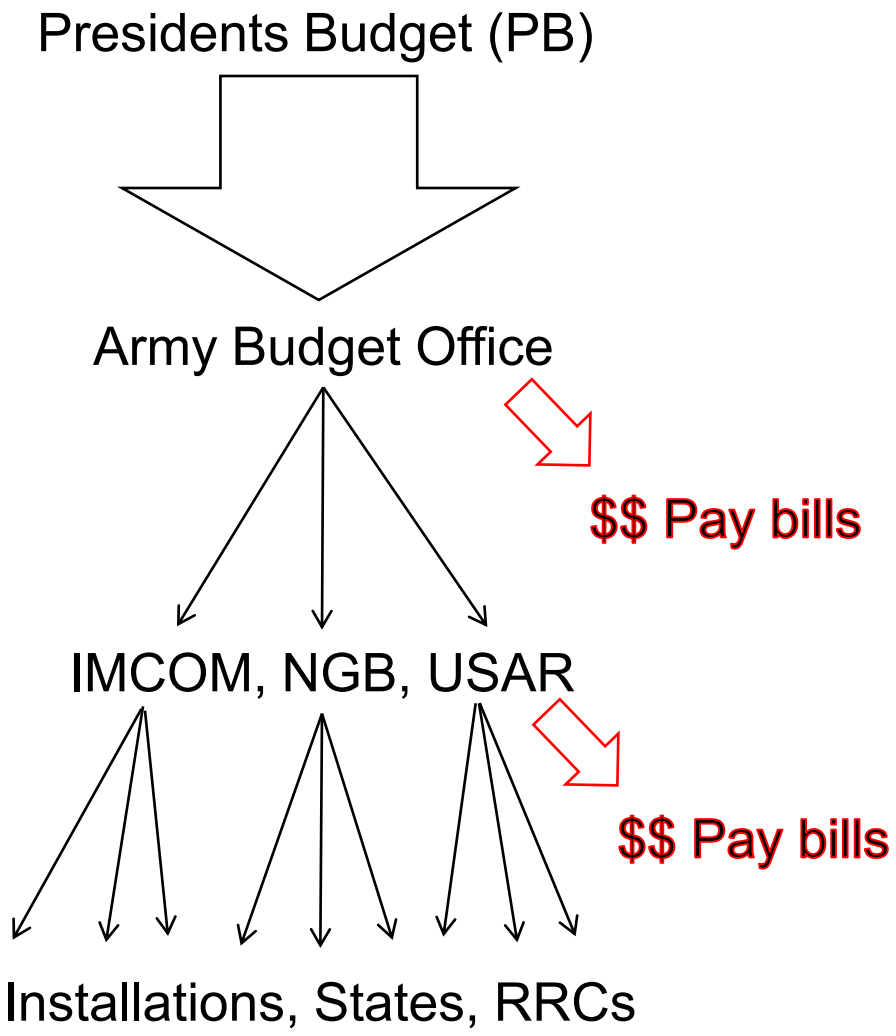
POM Deliberations

ECS Requirements

+

Non-Recurring Requirements

POM – Program Objective Memorandum
BES – Budget Estimate Submission

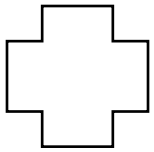


What Installations Get…

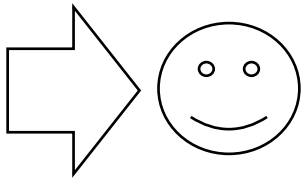
Commands distribute funds using different mechanisms

IMCOM

Recurring: Common Levels of Support (CLS)

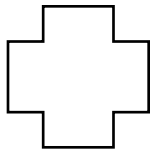


Non-Recurring: STEP

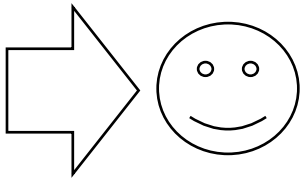


NGB

Recurring: Status Tool of the Environmental Program (STEP)

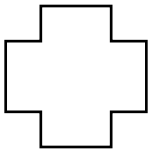


Non-Recurring: STEP

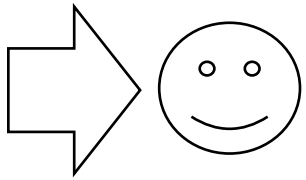


USARC

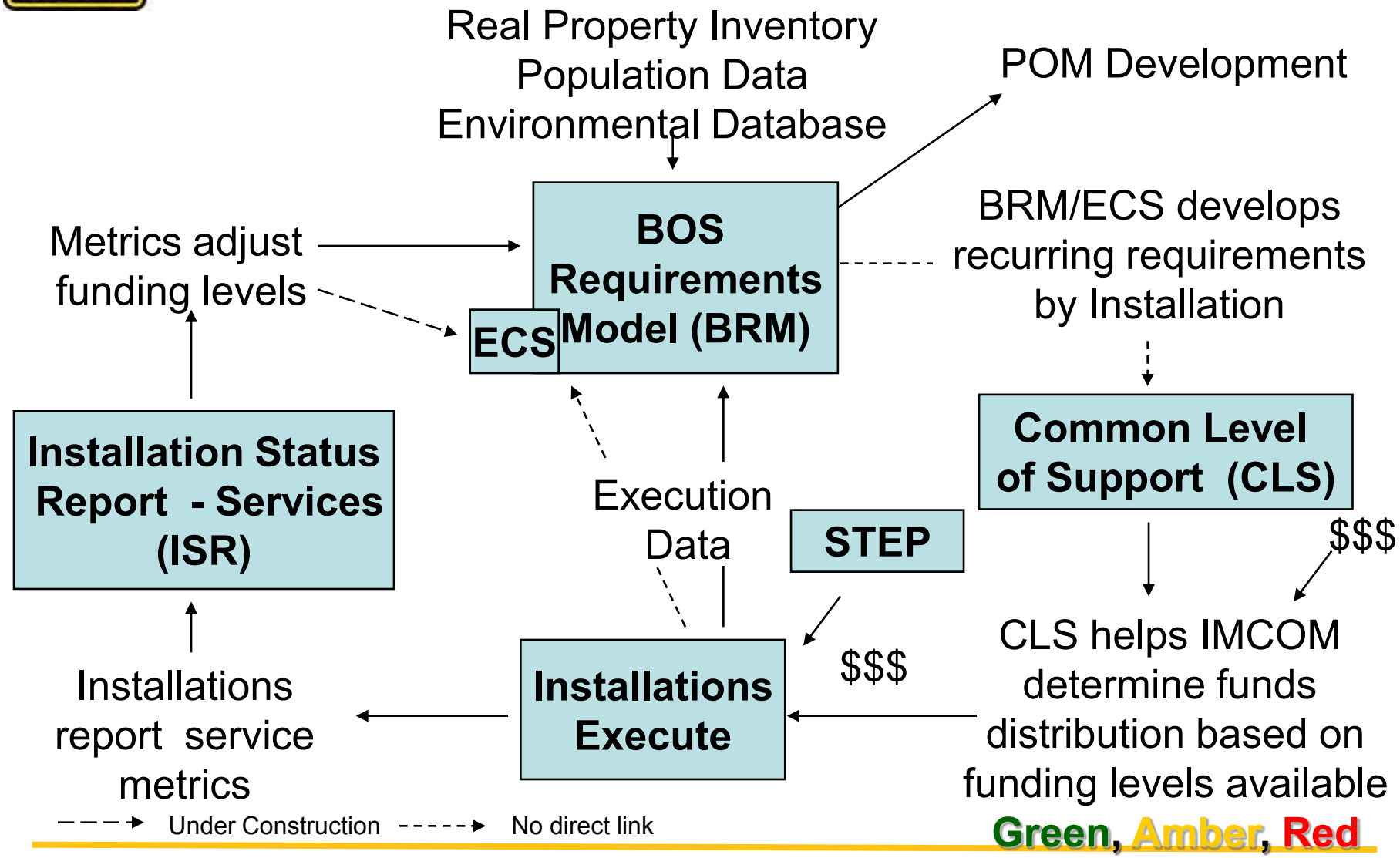
Recurring: CLS (yet to be implemented)



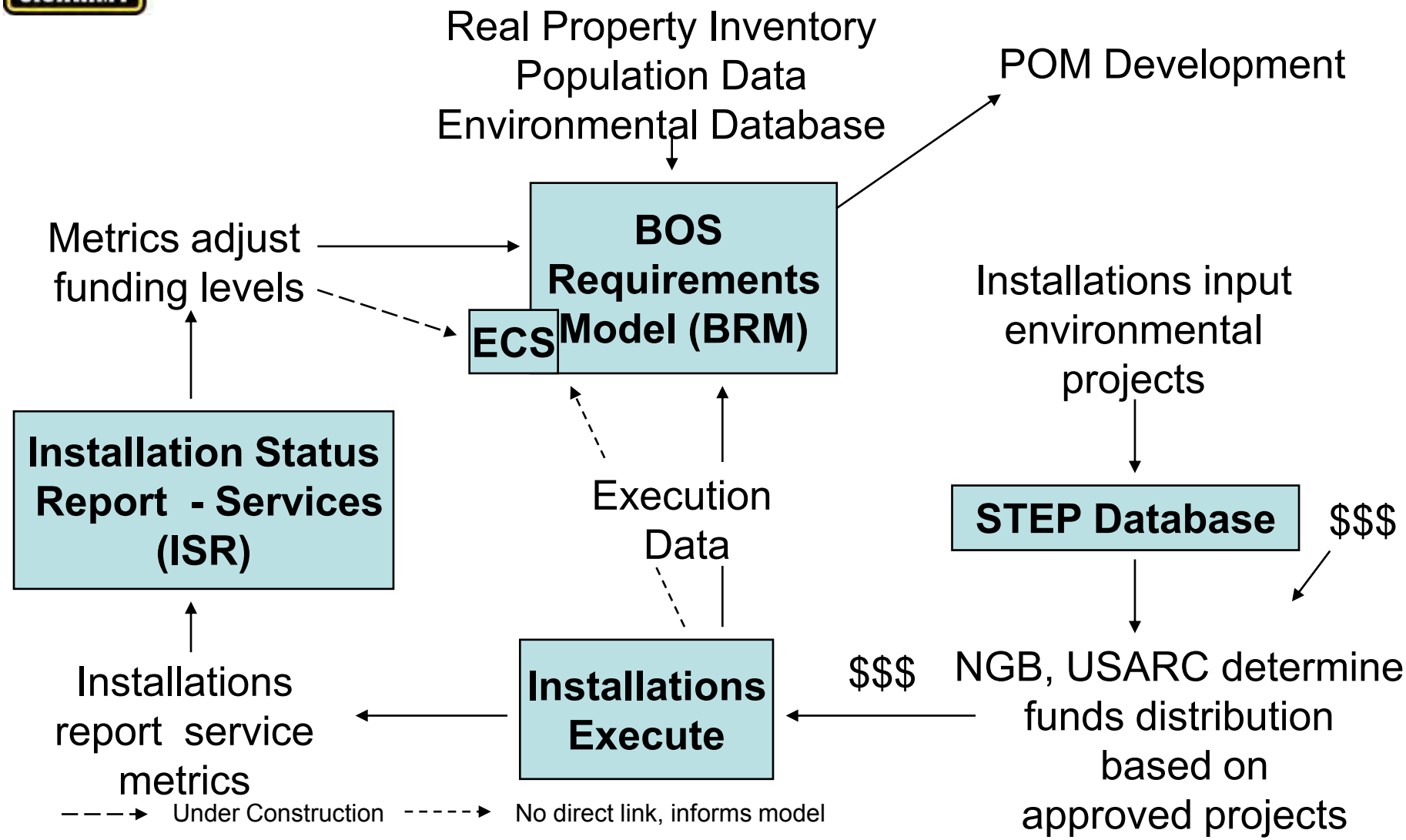
Non-Recurring



ECS, CLS, ISR, STEP Linkage



ECS, ISR, and STEP Linkage



BOS Requirements Model (BRM)

Installation Status Report (ISR)
["How Well" --- Level of Service: Green C1, Amber C2, Red C3, & Black C4]

- Performance
- Quantity
- Cost

http://brm.army.mil

The Standard Service Costing (SSC) methodology that forms the basic cost algorithms within BRM are developed, certified and validated by the Deputy Assistant Secretary of the Army for Cost and Economics (DASA-CE).

Standard Service Costing (SSC)
["Should Cost"]

ISR-Cost

ISR-Cost (previously SBC)
["How Much" --- Dollars & Quantities]

Adjustments allocated at CMD, Appn, MDEP and PE Level

II PEG MDEP Managers & POCs
Requirements Build

II PEG Requirements Review
RVT Validation

PROBE & and More HQDA Approved Adjustments (PBD's, PDM's, Senior Leader Changes)

Baseline Requirements at Installation Level by Appn, MDEP, PE and Service

POM Requirement AC/AR/NG

BRM requirements build requires BOTH ISR –S and ISR–Cost (SBC) data, plus the cost estimating relationships generated by the Standard Service Costing (SSC) methodology to generate the baseline BOS requirements portfolio for the Army.

Adjustments re-allocated at Installation Level by Appn, MDEP, PE and Service

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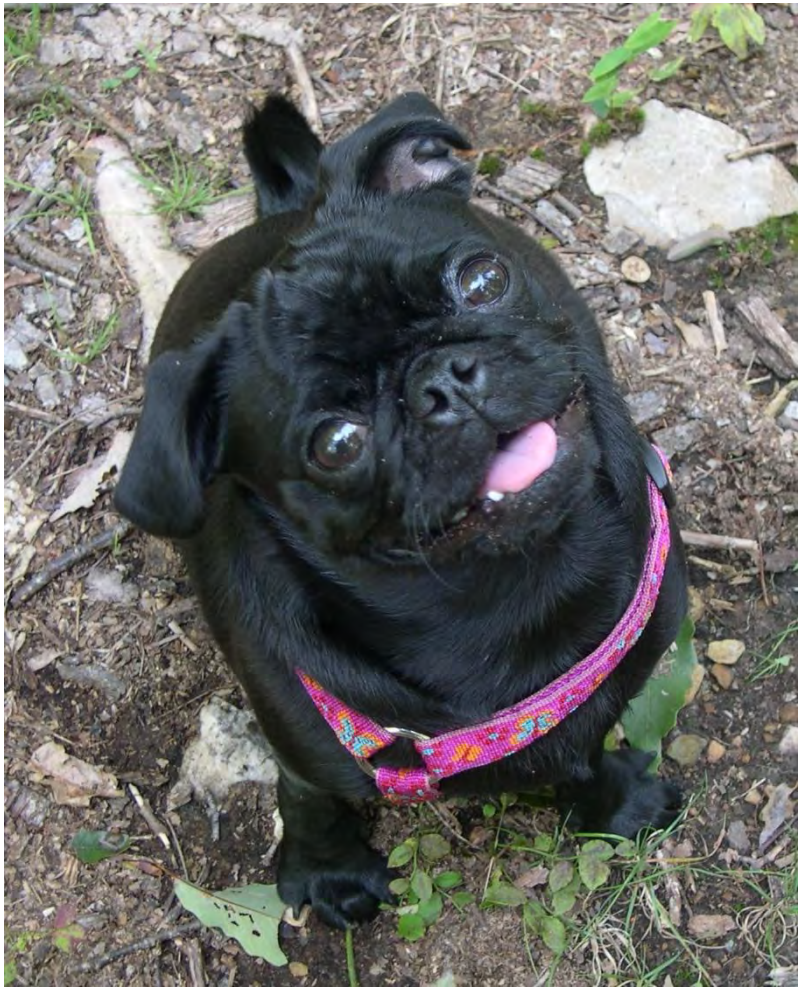
Questions???



ECS Documentation on AKO:

https://www.us.army.mil/suite/collaboration/GetDocument.do?doid=10798482

BRM website: http://brm.army.mil

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